

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS FO Box 1430 Alexandria, Virginia 22313-1450 www.tepto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/777,219	02/13/2004	Hakan Winbom	4010-37	2504	
23117 7590 05/07/2010 NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR			EXAMINER VIZVARY, GERALD C		
			3684		
			MAIL DATE	DELIVERY MODE	
			05/07/2010	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.	Applicant(s)	Applicant(s)		
10/777,219	WINBOM, HAKAN	WINBOM, HAKAN		
Examiner	Art Unit			
GERALD C. VIZVARY	3684			

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

patent term ad		

Period fo	or Reply
WHIC - Exter after - If NO - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, CHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. The state of time may be available under the provisions of 37 CPT 1.138(a). In no event, however, may a reply be timely filed SIX (5) MONTHS from the mailing date of files communication. The state of time time the state of the communication will apply and will expire SIX (6) MONTHS from the mailing date of this communication. The to reply within the set or restended period for reply will be application to become ABMONDED (SU S.C. § 133). The state of the stat
Status	
1)🛛	Responsive to communication(s) filed on 20 February 2009.
2a)□	This action is FINAL. 2b)⊠ This action is non-final.
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.
Dispositi	ion of Claims
4)⊠	Claim(s) 1-29 is/are pending in the application.
.—	4a) Of the above claim(s) is/are withdrawn from consideration.
5)	Claim(s) is/are allowed.
6)⊠	Claim(s) <u>1-29</u> is/are rejected.
	Claim(s) is/are objected to.
8)□	Claim(s) are subject to restriction and/or election requirement.
Applicati	ion Papers
9)	The specification is objected to by the Examiner.
	The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)	The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.
Priority ι	ınder 35 U.S.C. § 119
12)	Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a)	☐ All b) ☐ Some * c) ☐ None of:
	1. Certified copies of the priority documents have been received.
	2. Certified copies of the priority documents have been received in Application No
	3. Copies of the certified copies of the priority documents have been received in this National Stage
	application from the International Bureau (PCT Rule 17.2(a)).
* 5	See the attached detailed Office action for a list of the certified copies not received.
Attachmen	···
1) IN Notic	e of References Cited (PTO-892) 4) Interview Summary (PTO-413)

 Notice of Draftsperson's Patent Drawing Review (PTO-948)
 Information Displaceure Statement(e) (PTO/SE/05) Paper No(s)/Mail Date _____

Paper No(s)/Mail Date. ____.
5) Notice of Informal Patent Application.

6) Other: _____.

DETAILED ACTION

Introduction

 The following is a non-final office action in response to the communications received on 4/22/2010. Claims 1-29 are now pending in this application.

Response to Amendment

- 2. In the amendment filed 2/20/2009, the following has occurred:
 - a. Claims 1-5, 7, 8, 10-12 & 16-20 have been amended.
 - b. Claim 24-29 are new.

Now, claims 1-29 are presented for examination.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 9 is rejected under 35 USC § 101. In performing the steps of claim 9, there is no requirement that a machine be used. Therefore, the claimed subject matter may be performed using only human intelligence, which has recently been held to be non-statutory. Furthermore, process claims reciting abstract ideas are patentable only if the process involves one of the other statutory classes of subject matter (i.e. a machine, manufacture, or composition of matter). In re Comiskey, No. 2006-1286, (Fed. Cir. Sep. 20, 2007), 17-21.

Application/Control Number: 10/777,219 Page 3

Art Unit: 3684

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly

claiming the subject matter which the applicant regards as his invention.

Claim 19 & 23 are rejected under 35 USC § 112 2nd paragraph. The terms "gone

through", "checked" and "background" in claims 19 & 23 are unclear and render the

claim indefinite. The term "gone through" not defined by the claim and the specification

does not provide a standard for ascertaining the meaning and one of ordinary skill in the

art would not be reasonably apprised of the scope of the invention or if at the time the

application was filed, had possession of the claimed invention. How are the orders gone

through (checked) and what is the result of going through them? What constitutes the

"background" of a deal?

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims1-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang US

6.587.970 B1 in view of Kramer US 5.038.284.

As per claim 1 (currently amended) Wang US 6.587.970 B1 discloses a method for

Art Unit: 3684

trading in securities, the trading being carried out at a primary site the method comprising:

a primary site computer according to information received from market makers and traders, said information comprising quotes and orders for one or more instruments, wherein the primary computer is arranged to communicate over a communications link with a secondary site computer located at a secondary site different from the primary site ("However, the use of the configurable parameters of the primary host computer 110 by the secondary host computer 120 may prevent access to the secondary host computer 120. This is because the primary and secondary host computers 110, 120 are located in different networks, and most bridges or routers filter or forward packets according to their destination IP or other network address." Wang US 6,587,970 B1 col. 20, lines 39-45),

using said information to create deals in said-securities instruments, said deals also being stored at the primary site computer ("Those new connection requests that solicit information that may change during the period of load balancing or that modify information on the primary computer site 1210 are not affected and continue to be serviced by the primary computer site 1210. For example, any connection requests that make purchases, affect inventory, etc., are serviced by the primary computer site 1210, and are not permitted to be serviced by the secondary host computer 1220." Wang US 6,587,970 B1 col. 41, lines 11-22);

storing at a <u>the</u> secondary site <u>computer</u> replicas of the orders and deals ("After shutting down the primary host computer 110 at step 220, the site failover routine proceeds to

Art Unit: 3684

step 230, wherein the data of the primary host computer 110 is replicated or copied to another storage device 135 of the storage system that can be accessed by the secondary host computer 120." Wang US 6,587,970 B1 col. 41, lines 11-22); and

the secondary site computer using the deals stored at the secondary site to update the orders stored at the secondary site ("After replicating the data of the primary host computer 110, the routine proceeds to step 240, wherein the site failover routine powers on the secondary host computer 120 and brings the secondary host computer 120 on line as an identical replacement to the primary host computer 110. The secondary host computer thus utilizes the replicated data (operating system data, application programs, and application program data) of the primary host computer 110 as if it were its own." Wang US 6,587,970 B1 col. 9, lines 55-63).

Wang US 6,587,970 B1 fails to explicitly teach receiving and storing of said information at the primary site computer

Kramer US 5,038,284 teaches "The new transaction, as indicated by flow line 210, leads to block 212 which indicates that a posting is made to the primary and backup blotters. This block 212 is also receiving indications from transaction block 196 via line 214. These regular transactions are also posted to the primary and backup blotters as indicated by block 212." Kramer US 5,038,284, col. 13, lines 63-67)

It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Wang US 6,587,970 B1 to include receiving and storing external information as taught by Kramer US 5,038,284,. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Wang

Art Unit: 3684

US 6,587,970 B1 in this way in order to enable the hosting of an electronic commerce

site (see at least col. 3, lines 27-28 of Wang US 6,587,970 B1).

As per claim 2 (currently amended) Wang US 6,587,970 B1 in view of Kramer US

5,038,284 teaches a method of claim 1.

Wang US 6,587,970 B1 further discloses that the replicas of the orders and deals stored $\,$

at the secondary site $\underline{\text{computer}}$ are forwarded $\underline{\text{from}}\ \underline{\text{by}}$ the primary site $\underline{\text{computer}}\ \text{over}$

the communications link to the secondary computer, at which primary site computer the

information. ("However, the use of the configurable parameters of the primary host

computer 110 by the secondary host computer 120 may prevent access to the

secondary host computer 120. This is because the primary and secondary host

computers 110, 120 are located in different networks, and most bridges or routers filter

or forward packets according to their destination IP or other network address." Wang

US 6,587,970 B1 col. 20, lines 39-45)

Wang US 6,587,970 B1 fails to explicitly teach that the replicas of the order and deals

are based is first received from the market makers and traders.

Kramer US 5,038,284 teaches "A central computer equipped with communications

hardware and specially designed software receives transaction data from personal

transaction stations operated by traders" (Kramer US 5.038.284 abstract)

It would have been obvious to one of ordinary skill in the art at the time of the invention

to expand the method of Wang US 6,587,970 B1 to include data received from the

market makers and traders as taught by Kramer US 5,038,284,. One of ordinary skill in

Art Unit: 3684

the art at the time of the invention would have been motivated to expand the method of Wang US 6,587,970 B1 in this way in order to enable the hosting of an electronic commerce site (see at least col. 3, lines 27-28 of Wang US 6,587,970 B1).

As per claim 3 (currently amended) Wang US 6,587,970 B1 in view of Kramer US 5.038,284 teaches a method of claim 1.

Wang US 6,587,970 B1 fails to explicitly teach that the replicas of the orders and deals stored at the secondary site <u>computer</u> are based on information received at the secondary site computer directly from the market makers and traders.

Kramer US 5,038,284 teaches "A central computer equipped with communications hardware and specially designed software receives transaction data from personal transaction stations operated by traders" Kramer US 5,038,284 abstract)

It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Wang US 6,587,970 B1 to include data received from the market makers and traders as taught by Kramer US 5,038,284,. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Wang US 6,587,970 B1 in this way in order to enable the hosting of an electronic commerce site (see at least col. 3, lines 27-28 of Wang US 6,587,970 B1).

As per claim 4 (currently amended) Wang US 6,587,970 B1 discloses an automated system for trading in securities, said system comprising:

a primary site including a primary site computer programmed to:

Art Unit: 3684

store said information in memory at the primary site <u>associated with the primary site</u> <u>computer</u> ("Those new connection requests that solicit information that may change during the period of load balancing or that modify information on the primary computer site 1210 are not affected and continue to be serviced by the primary computer site 1210. For example, any connection requests that make purchases, affect inventory, etc., are serviced by the primary computer site 1210, and are not permitted to be serviced by the secondary host computer 1220." Wang US 6,587,970 B1 col. 41, lines 11-22),

and a secondary site <u>physically separated from the primary site</u>, the <u>secondary site</u> including a secondary site computer <u>arranged to communicate with the primary site</u> computer, the <u>secondary site computer</u> ("For example, where the operating system of the primary host computer 110 is stored in a separate volume or storage device from the rest of the data (e.g., application programs and application program data), the operating system can be replicated at a time prior to a malfunction or failure of the primary host computer 110, and the remaining data of the primary host computer 110 can be replicated thereafter." Wang US 6,587,970 B1 col. 11, lines 9-16) being programmed to:

store replicas of the orders received and the deals created at the primary site in a memory at the secondary site <u>associated with the secondary site computer</u>, and use the deals stored at the secondary site <u>computer</u> to update the orders stored in the memory at the secondary site. ("After shutting down the primary host computer 110 at step 220, the site failover routine proceeds to step 230, wherein the data of the primary

Art Unit: 3684

host computer 110 is replicated or copied to another storage device 135 of the storage system that can be accessed by the secondary host computer 120." Wang US 6,587,970 B1 col. 9, lines 37-41)

Wang US 6,587,970 B1 fails to explicitly teach receiving information from market makers and traders, said information comprising quotes and orders for at least one instrument, and

create deals using said received information and store said deals in the memory at the primary site,

Kramer US 5,038,284 teaches "A central computer equipped with communications hardware and specially designed software receives transaction data from personal transaction stations operated by traders" (Kramer US 5,038,284 abstract) and "As will be shown, there is also included within the system of the invention a central computer, or host, for receiving and processing the first signals and for transmitting the second signals which are received by the portable stations. The host includes processing arrangements for reconciling the first signals representing data entered by traders with first signals representing data entered by contra traders, and for determining correspondence between the data entered by the traders with the data entered by contra traders." (Kramer US 5,038,284, col. 4, lines 56-66)

It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Wang US 6,587,970 B1 to include data received from the market makers and traders and deal generation as taught by Kramer US 5,038,284,.

One of ordinary skill in the art at the time of the invention would have been motivated to

Art Unit: 3684

expand the method of Wang US 6,587,970 B1 in this way in order to enable the hosting of an electronic commerce site (see at least col. 3, lines 27-28 of Wang US 6,587,970 B1)

As per claim 5 (currently amended) Wang US 6,587,970 B1 in view of Kramer US 5,038,284 teaches a system of claim 4.

Wang US 6,587,970 B1 further discloses means for transmitting over the communications link from the primary site to the secondary site the information on which the replicas at the secondary site are based. ("After shutting down the primary host computer 110 at step 220, the site failover routine proceeds to step 230, wherein the data of the primary host computer 110 is replicated or copied to another storage device 135 of the storage system that can be accessed by the secondary host computer 120." Wang US 6,587,970 B1 col. 9, lines 37-41)

As per claim 6 (previously presented) Wang US 6,587,970 B1 in view of Kramer US 5,038,284 teaches a system of claim 4.

Wang US 6,587,970 B1 further discloses that means at the secondary site for receiving information directly from the market makers and traders on which the replicas stored in the memory at the secondary site are based. ("For example, referring to FIG. 1, the controller 160 can instruct the storage processor 133 to modify the assignment of those storage devices 135 assigned to port adapter 132A so that they are instead assigned to port adapter 132B. With this modification, no data replication is required, and the

Art Unit: 3684

secondary host computer 120 can directly access the data of the primary host computer 110." Wang US 6.587.970 B1 col. 12. lines 3-9)

As per claim 7 (currently amended) Wang US 6,587,970 B1 discloses a method for use in the automated trading of securities, the trading being carried out <u>using a primary site</u> computer located at a primary site, <u>wherein the primary computer is arranged to communicate over a communications link with a secondary site computer located at a secondary site geographically remote from the primary site. ("The backup copy may be a local backup copy (i.e., local to storage system 130), or may be a remote backup copy (i.e., to a storage system other than storage system 130)." Wang US 6,587,970 B1 col. 40, lines 15-43) the method comprising:</u>

receiving and storing of said information at the primary site computer;

the primary site computer using said information to create deals in said securities, said deals being stored at the primary site computer ("Those new connection requests that solicit information that may change during the period of load balancing or that modify information on the primary computer site 1210 are not affected and continue to be serviced by the primary computer site 1210. For example, any connection requests that make purchases, affect inventory, etc., are serviced by the primary computer site 1210, and are not permitted to be serviced by the secondary host computer 1220." Wang US 6,587,970 B1 col. 41, lines 11-22);

storing at a the secondary site <u>computer</u> replicas of the orders and deals ("Those new connection requests that solicit information that may change during the period of load

Art Unit: 3684

balancing or that modify information on the primary computer site 1210 are not affected and continue to be serviced by the primary computer site 1210. For example, any connection requests that make purchases, affect inventory, etc., are serviced by the primary computer site 1210, and are not permitted to be serviced by the secondary host computer 1220." Wang US 6,587,970 B1 col. 41, lines 11-22); and

the secondary site computer using a corrective function using and the deals stored at the secondary site computer to the orders stored at the secondary site computer, wherein trading of securities is continued at the secondary site in case of a malfunction at the primary site; in which case the market makers and traders are prompted to submit new quotes to the secondary site.

Wang US 6,587,970 B1 fails to explicitly teach that according to information received from market makers and traders, said information comprising quotes and orders for one or more instrument

Kramer US 5,038,284 teaches "As will be shown, there is also included within the system of the invention a central computer, or host, for receiving and processing the first signals and for transmitting the second signals which are received by the portable stations. The host includes processing arrangements for reconciling the first signals representing data entered by traders with first signals representing data entered by contra traders, and for determining correspondence between the data entered by the traders with the data entered by contra traders." (Kramer US 5,038,284, col. 4, lines 56-66)

Art Unit: 3684

It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Wang US 6,587,970 B1 to include data received from the market makers and traders and deal generation as taught by Kramer US 5,038,284,. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Wang US 6,587,970 B1 in this way in order to enable the hosting of an electronic commerce site (see at least col. 3, lines 27-28 of Wang US 6,587,970 B1)

As per claim 8 (currently amended) Wang US 6,587,970 B1 in view of Kramer US 5,038,284 teaches a method of claim 7.

Wang US 6,587,970 B1 further discloses that the secondary site computer makes the determination that there has been a malfunction at the primary site and that continues the trading should be continued at the secondary site. ("For example, where the primary host computer 110 fails in a manner in which it is not shutdown in an orderly fashion resulting in a loss of data, the controller 160 can perform additional steps enabling the secondary host computer 120 to utilize a backup copy of data used by the primary host computer 110. That is, rather than using the data of the primary host computer 110 that was replicated in step 230, the controller 160 can utilize different data, such as the most recent known-good backup of data from the primary host computer 110. This data may be resident on other storage devices 135 of the storage system 130, or may be copied from another storage system (not shown) for this purpose." Wang US 6,587,970 B1 col. 12. lines 12-24)

Art Unit: 3684

As per claim 9 (original) Wang US 6,587,970 B1 in view of Kramer US 5,038,284 teaches a method of claim 7.

Wang US 6,587,970 B1 further discloses that an operator makes the determination that there has been a malfunction at the primary site, and that the trading should be continued at the secondary site. ("For example, rather than utilizing relays 170 and 171 to automatically power-off the primary host computer 110 and automatically power-on the secondary host computer 120, one or more of these steps may be performed

manually." Wang US 6.587.970 B1 col. 10, lines 42-46)

As per claim 10 (currently amended) Wang US 6,587,970 B1 in view of Kramer US 5.038.284 teaches a method of claim 7.

Wang US 6,587,970 B1 further discloses that the replicas stored at the secondary site computer are forwarded from the primary site computer via the communications link, at which primary site computer. ("However, the use of the configurable parameters of the primary host computer 110 by the secondary host computer 120 may prevent access to the secondary host computer 120. This is because the primary and secondary host computers 110, 120 are located in different networks, and most bridges or routers filter or forward packets according to their destination IP or other network address." Wang US 6,587,970 B1 col. 20, lines 39-45)

Wang US 6,587,970 B1 fails to explicitly teach that the information on which the replicas are based is first received from the market makers and traders.

Art Unit: 3684

Kramer US 5,038,284 teaches "A central computer equipped with communications hardware and specially designed software receives transaction data from personal transaction stations operated by traders" Kramer US 5,038,284 abstract)

It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Wang US 6,587,970 B1 to include data received from the market makers and traders as taught by Kramer US 5,038,284,. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Wang US 6,587,970 B1 in this way in order to enable the hosting of an electronic commerce site (see at least col. 3, lines 27-28 of Wang US 6,587,970 B1).

As per claim 11 (currently amended) Wang US 6,587,970 B1 in view of Kramer US 5.038.284 teaches a method of claim 7.

Wang US 6,587,970 B1 fails to explicitly teach that the replicas stored at the secondary site <u>computer</u> are based on information received at the secondary site directly from the market makers and traders.

Kramer US 5,038,284 teaches "A central computer equipped with communications hardware and specially designed software receives transaction data from personal transaction stations operated by traders" Kramer US 5,038,284 abstract)

It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Wang US 6,587,970 B1 to include data received from the market makers and traders as taught by Kramer US 5,038,284. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of

Art Unit: 3684

Wang US 6,587,970 B1 in this way in order to enable the hosting of an electronic commerce site (see at least col. 3, lines 27-28 of Wang US 6,587,970 B1).

As per claim 12 (currently amended) Wang US 6,587,970 B1 discloses an automated system for trading in securities, said system comprising: a primary site including: automated means for storing said information at the primary site, automated means for creating deals using said received information, and automated means for storing said deals at the primary site, a secondary site geographically remote from the primary site and coupled to the primary site by a communications means, the secondary site ("The backup copy may be a local backup copy (i.e., local to storage system 130), or may be a remote backup copy (i.e., to a storage system other than storage system 130)." Wang US 6,587,970 B1 col. 40, lines 15-43) including: automated means for storing replicas of the orders received and the deals created at the primary site ("Those new connection requests that solicit information that may

the primary site ("Those new connection requests that solicit information that may change during the period of load balancing or that modify information on the primary computer site 1210 are not affected and continue to be serviced by the primary computer site 1210. For example, any connection requests that make purchases, affect inventory, etc., are serviced by the primary computer site 1210, and are not permitted to be serviced by the secondary host computer 1220." Wang US 6,587,970 B1 col. 41, lines 11-22).

automated means for a corrective function for using the deals stored at the secondary site to update the orders stored at the secondary site ("The replicated data may also be

Art Unit: 3684

periodically updated, prior to a detected malfunction or failure of the primary host computer 110, to reflect any changes made to the data of the primary host computer 110 during operation." Wang US 6,587,970 B1 col. 10, lines 58-62), and

automated means for determining that there has been a malfunction at the primary site such that the trading should be continued at the secondary site.

Wang US 6,587,970 B1 fails to explicitly teach automated means for receiving information from market makers and traders, said information comprising quotes and orders for at least one instrument.

Kramer US 5,038,284 teaches "A central computer equipped with communications hardware and specially designed software receives transaction data from personal transaction stations operated by traders" Kramer US 5,038,284 abstract)

It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Wang US 6,587,970 B1 to include data received from the market makers and traders as taught by Kramer US 5,038,284,. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Wang US 6,587,970 B1 in this way in order to enable the hosting of an electronic commerce site (see at least col. 3, lines 27-28 of Wang US 6,587,970 B1)

As per claim 13 (original) Wang US 6,587,970 B1 in view of Kramer US 5,038,284 teaches a system of claim 12.

Wang US 6,587,970 B1 fails to explicitly teach an automated function for prompting the market makers and traders to submit new quotes to the secondary site.

Art Unit: 3684

Kramer US 5,038,284 teaches "Starting the scroll appears at 484 and provides for changing data in the first position to blanks and zeros at 486, blanking out of a symbol with instructions to enter a new symbol (e.g. ABC at 489) at 488 and "net set to zero" with instructions to enter a new net position (e.g. -15 at 491) at 490." (Kramer US 5,038,284, col. 20, lines 15-20) and "A central computer equipped with communications hardware and specially designed software receives transaction data from personal transaction stations operated by traders" Kramer US 5,038,284 abstract)

It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Wang US 6,587,970 B1 to include an automated function for prompting the market makers and traders to submit new quotes as taught by Kramer US 5,038,284,. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Wang US 6,587,970 B1 in this way in order to enable the hosting of an electronic commerce site (see at least col. 3, lines 27-28 of Wang US 6,587,970 B1)

As per claim 14 (previously presented) Wang US 6,587,970 B1 in view of Kramer US 5,038,284 teaches a system of claim 12.

Wang US 6,587,970 B1 further discloses an automated means for transmitting from the primary site to the secondary site the information on which the replicas at the secondary site are based. ("After shutting down the primary host computer 110 at step 220, the site failover routine proceeds to step 230, wherein the data of the primary host computer 110 is replicated or copied to another storage device 135 of the storage system that can

Art Unit: 3684

be accessed by the secondary host computer 120." Wang US 6,587,970 B1 col. 9, lines 37-41)

As per claim 15 (previously presented) Wang US 6,587,970 B1 in view of Kramer US 5,038,284 teaches a system of claim 12.

Wang US 6,587,970 B1 further discloses an automated means at the secondary site for receiving information directly from the market makers and traders on which the replicas stored at the secondary site are based. ("For example, referring to FIG. 1, the controller 160 can instruct the storage processor 133 to modify the assignment of those storage devices 135 assigned to port adapter 132A so that they are instead assigned to port adapter 132B. With this modification, no data replication is required, and the secondary host computer 120 can directly access the data of the primary host computer 110." Wang US 6,587,970 B1 col. 12, lines 3-9)

As per claim 16 (currently amended) Wang US 6,587,970 B1 discloses an automated corrective method for use in an automated system for trading in securities, comprising: in which passing system information from a primary trading site computer is passed to and stored at a secondary site computer located at a secondary site linked to the primary trading site by a communications link, said-corrective method storing the system information at the secondary site in a memory associated with the secondary site computer ("However, the use of the configurable parameters of the primary host computer 110 by the secondary host computer 120 may prevent access to the

Art Unit: 3684

secondary host computer 120. This is because the primary and secondary host computers 110, 120 are located in different networks, and most bridges or routers filter or forward packets according to their destination IP or other network address." Wang US 6,587,970 B1 col. 20, lines 39-45), and

the secondary site computer using the deal information passed to the secondary site computer to update the order information stored at the secondary site computer. ("The replicated data may also be periodically updated, prior to a detected malfunction or failure of the primary host computer 110, to reflect any changes made to the data of the primary host computer 110 during operation." Wang US 6,587,970 B1 col. 10, lines 58-62)

Wang US 6,587,970 B1 fails to explicitly teach information regarding orders and deals from a primary trading site.

Kramer US 5,038,284 teaches "A central computer equipped with communications hardware and specially designed software receives transaction data from personal transaction stations operated by traders" Kramer US 5,038,284 abstract)

It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Wang US 6,587,970 B1 to include data received from the market makers and traders as taught by Kramer US 5,038,284,. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Wang US 6,587,970 B1 in this way in order to enable the hosting of an electronic commerce site (see at least col. 3, lines 27-28 of Wang US 6,587,970 B1)

Art Unit: 3684

As per claim 17 (currently amended) Wang US 6,587,970 B1 in view of Kramer US

5,038,284 teaches an automated corrective method of claim 16.

Wang US 6,587,970 B1 further discloses monitoring the information regarding deals

stored at the secondary site computer in order to update the information regarding

orders stored at the secondary site computer. ("The replicated data may also be

periodically updated, prior to a detected malfunction or failure of the primary host

computer 110, to reflect any changes made to the data of the primary host computer

110 during operation." Wang US 6,587,970 B1 col. 10, lines 58-62)

As per claim 18 (currently amended) Wang US 6,587,970 B1 in view of Kramer US

5,038,284 teaches an automated corrective method of claim 16.

Wang US 6,587,970 B1 further discloses that the order information which is passed to

the secondary site $\underline{\text{computer}}$ is passed via the deal information stored at the secondary

site computer. ("This helps to ensure that data can be quickly accessed by both the

primary and secondary host computers 110, 120, as different storage devices and

adapters are involved in the transfers of data for the different host computers." Wang,

US 6,587,970 B1 col. 35, lines 32-35)

As per claim 19 (currently amended) Wang US 6,587,970 B1 in view of Kramer US

5,038,284 teaches an automated corrective method of claim 16.

Wang US 6,587,970 B1 further discloses that copies of the orders and deals are stored

at the secondary site computer, and at defined intervals, said orders are gone through

Art Unit: 3684

against the background of said deals. ("The replicated data may also be periodically updated, prior to a detected malfunction or failure of the primary host computer 110, to reflect any changes made to the data of the primary host computer 110 during operation." Wang US 6.587.970 B1 col. 10. lines 58-62)

operation." Wang US 6,587,970 B1 col. 10, lines 58-62)

As per claim 20 (currently amended) Wang US 6,587,970 B1 discloses a computer for use in an automated system for trading in securities, in which system information is passed to and stored at a secondary site located remotely from the primary trading site, wherein the computer is configured for operation at the secondary site to use the deal information passed to the secondary site to update the order information stored at the secondary site. ("However, the use of the configurable parameters of the primary host computer 110 by the secondary host computer 120 may prevent access to the secondary host computer 120. This is because the primary and secondary host computers 110, 120 are located in different networks, and most bridges or routers filter or forward packets according to their destination IP or other network address." Wang US 6,587,970 B1 col. 20, lines 39-45)

Wang US 6,587,970 B1 fails to explicitly teach orders and deals from a primary trading site computer.

Kramer US 5,038,284 teaches "A central computer equipped with communications hardware and specially designed software receives transaction data from personal transaction stations operated by traders" Kramer US 5,038,284 abstract)

Art Unit: 3684

It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Wang US 6,587,970 B1 to include data received from the market makers and traders as taught by Kramer US 5,038,284,. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Wang US 6,587,970 B1 in this way in order to enable the hosting of an electronic commerce site (see at least col. 3, lines 27-28 of Wang US 6,587,970 B1)

As per claim 21 (previously presented) Wang US 6,587,970 B1 in view of Kramer US 5,038,284 teaches a computer of claim 20.

Wang US 6,587,970 B1 further discloses monitoring the information regarding deals stored at the secondary site in order to update the information regarding orders stored at the secondary site. ("The replicated data may also be periodically updated, prior to a detected malfunction or failure of the primary host computer 110, to reflect any changes made to the data of the primary host computer 110 during operation." Wang US 6,587,970 B1 col. 10, lines 58-62)

As per claim 22 (previously presented) Wang US 6,587,970 B1 in view of Kramer US 5,038,284 teaches a computer of claim 20.

Wang US 6,587,970 B1 further discloses that the order information is provided to the secondary site via the deal information stored at the secondary site. ("This helps to ensure that data can be quickly accessed by both the primary and secondary host computers 110, 120, as different storage devices and adapters are involved in the

Art Unit: 3684

transfers of data for the different host computers." Wang, US 6,587,970 B1 col. 35, lines

32-35)

As per claim 23 (previously presented) Wang US 6,587,970 B1 in view of Kramer US

5,038,284 teaches a computer of claim 20.

Wang US 6,587,970 B1 further discloses configuring to store copies of the orders and

deals at the secondary site, and at defined intervals, check the orders against the

background of the deals. ("The replicated data may also be periodically updated, prior to

a detected malfunction or failure of the primary host computer 110, to reflect any

changes made to the data of the primary host computer 110 during operation." Wang

US 6,587,970 B1 col. 10, lines 58-62)

As per claim 24 (new) Wang US 6,587,970 B1 in view of Kramer US 5,038,284 teaches

a computer of claim 20.

Wang US 6,587,970 B1 further discloses that the primary trading site computer receives

quotes from market makers and orders from traders, and wherein the computer is~

configured, so that when operated at the secondary site, to store the orders from traders

and the deal information but not to store quotes from the market makers. ("For example,

where the primary host computer 110 fails in a manner in which it is not shutdown in an

orderly fashion resulting in a loss of data, the controller 160 can perform additional

steps enabling the secondary host computer 120 to utilize a backup copy of data used

by the primary host computer 110. That is, rather than using the data of the primary host

Art Unit: 3684

computer 110 that was replicated in step 230, the controller 160 can utilize different data, such as the most recent known-good backup of data from the primary host computer 110." Wang US 6,587,970 B1 col. 12, lines 12-21)

As per claim 25 (new) Wang US 6,587,970 B1 in view of Kramer US 5,038,284 teaches a automated corrective method of claim 16.

Wang US 6,587,970 B1 further discloses that the primary trading site computer receives quotes from market makers and orders from traders, and wherein the secondary site computer stores the orders from traders and the deal information but does not store quotes from the market makers. ("The controller when operatively coupled to the first host computer and the second host computer, automatically configures the second host computer to use at least a portion of the data of the first host computer that corresponds to the electronic commerce site to host a portion of the electronic commerce site on the second host computer in response to a change in operation of the electronic commerce site." Wang US 6,587,970 B1 col. 3, lines 38-43)

As per claim 26 (new) Wang US 6,587,970 B1 in view of Kramer US 5,038,284 teaches a system of claim 12,

Wang US 6,587,970 B1 further discloses that the automated means for storing at the secondary site is configured to not store replicas of the quotes from the market makers. ("In one embodiment, all of the data used by the primary host computer 110 (i.e., the operating system, application programs, application program data, etc.) is replicated for

Art Unit: 3684

use by the secondary host computer 120. In other embodiments, only portions of the data of the primary host computer 110 are replicated, as described further below." Wang US 6,587,970 B1 col. 17, lines 2-7)

As per claim 27 (new) Wang US 6,587,970 B1 in view of Kramer US 5,038,284 teaches a method of claim 7.

Wang US 6,587,970 B1 further discloses that the secondary site computer does not store replicas of the quotes from the market makers. ("In one embodiment, all of the data used by the primary host computer 110 (i.e., the operating system, application programs, application program data, etc.) is replicated for use by the secondary host computer 120. In other embodiments, only portions of the data of the primary host computer 110 are replicated, as described further below." Wang US 6,587,970 B1 col. 17, lines 2-7)

As per claim 28 (new) Wang US 6,587,970 B1 in view of Kramer US 5,038,284 teaches a system of claim 4.

Wang US 6,587,970 B1 further discloses that the secondary site computer is programmed to not store replicas of the quotes from the market makers. ("In one embodiment, all of the data used by the primary host computer 110 (i.e., the operating system, application programs, application program data, etc.) is replicated for use by the secondary host computer 120. In other embodiments, only portions of the data of

the primary host computer 110 are replicated, as described further below." Wang US

6,587,970 B1 col. 17, lines 2-7)

As per claim 29 (new) Wang US 6,587,970 B1 in view of Kramer US 5,038,284 teaches

a method of claim 1.

Wang US 6,587,970 B1 further discloses that the secondary site computer does not

store replicas of the quotes from the market makers. ("In one embodiment, all of the

data used by the primary host computer 110 (i.e., the operating system, application

programs, application program data, etc.) is replicated for use by the secondary host

computer 120. In other embodiments, only portions of the data of the primary host

computer 110 are replicated, as described further below." Wang US 6,587,970 B1 col.

17, lines 2-7)

Conclusion

6. The following is prior art made of record and not relied upon is considered

pertinent to applicant's disclosure:

Ferstenberg (5,873,071) teaches software processes distributed on one or more

computer systems that exchange messages in order to facilitate an intermediated

exchange of financial commodities between a plurality of participants. The messages

are exchanged according to a preferred protocol that leads to a satisfactory exchange

that meets the objectives of the participants, and that substantially maximizes in a fair

manner the total amount of financial commodities exchanged.

Art Unit: 3684

Langseth (US 6,662,195 B1) teaches a data warehousing system stores the raw data

population for an underlying delivery system for a personal intelligence network that

actively delivers highly personalized and timely informational and transactional data

collects and distributes e-mail and other content from a hub-and-spoke style source

architecture.

Stewart (US 5,715,453) teaches a web server computer system including a transaction

processor that reads a configuration file to determine how to handle incoming function

calls to retrieve dynamic data by querying a data source.

Moy (US 5,230,048) teaches a multitask multiuser system providing for efficient transfer

of data from a remote data base to individual subscribers and has particular utility in the

distribution of stock market data.

Application/Control Number: 10/777,219 Page 29

Art Unit: 3684

7. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Gerald C. Vizvary whose telephone number is 571-270-

3268. The examiner can normally be reached on Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Abdi Kambiz can be reached on 571-272-6702. The fax phone number for

the organization where this application or proceeding is assigned is 571-270-4268.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thomas Dixon/ Primary Examiner, Art Unit 3684

Gerald Vizvary

Patent Examiner, A.U. 3684

May 5, 2010